



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

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CHICAGO, IL 60604-3590

APR 07 2011

REPLY TO THE ATTENTION OF: E-19J

Mr. Jeffery Benedict  
U.S. Army Corps of Engineers  
Pittsburgh District  
William Morehead Building  
1000 Liberty Avenue  
Pittsburgh, Pennsylvania 15222-4186

RE: Ohio River System Investment Plan and Programmatic Final Environmental Impact Statement (EIS) for the Illinois, Indiana, Kentucky, Ohio, Pennsylvania, and West Virginia Integrated Main Report -- CEQ Number: 20110053

Dear Mr. Benedict:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act, we have reviewed the U.S. Army Corps of Engineers' (Corps) 2010 System Investment Plan and Programmatic Final Environmental Impact Statement (EIS) for the Ohio River. EPA Region 5 is the lead region for the review of this project in coordination with our Region 3 office in Philadelphia.

EPA understands the need for the proposed project is to provide a more modern and efficient lock and dam system for the movement of commodities on the Ohio River. The purpose of the System Investment Plan (SIP) is to serve as a long-term planning tool for decision makers to maintain safe, environmentally sustainable, and reliable navigation on the Ohio River for the period 2010-2070. However, the SIP does not recommend specific projects. The Programmatic Final EIS focuses on a system-wide cumulative effects assessment (CEA) as well as other studies focused on specific issues identified through the scoping process. We look forward to coordinating with the USACE on future site-specific analyses required for recommended actions.

Our July 25, 2006 comment letter rated the Programmatic Draft EIS as "Environmental Concerns -- Insufficient Information" (EC-2). Our environmental concerns centered on how implementation of the proposed SIP will influence the ecological future of the Ohio River System. Additional information was required to support the analysis and findings stated in the document. The overall rating was based on our concerns with adaptive management, institutional arrangements, environmental justice, cumulative impact analysis and mitigation, and water quality.

Several of our comments were addressed in the Final Feasibility Report/EIS. Particularly, our 2006 comments concerning Total Maximum Daily Loads and National Discharge Elimination System permits were adequately addressed. We continue to urge the Corps to undertake early coordination with the six states bordering the Ohio River Mainstem on potential NPDES permit

needs. Likewise, our 2006 comment concerning potential adjunct use of the lock and dam impoundment structures to serve as reservoirs for hydropower generation projects and the resultant potential impacts to lock operations was also addressed. However, we continue to have concerns with adaptive management, institutional arrangements, and the environmental justice analysis.

### Adaptive Management

EPA continues to support adaptive management as a strategy to implement both the navigation improvements and ecosystem restoration. However, the Programmatic Final EIS provides only a general discussion of possible approaches for implementing navigation and environmental sustainability projects. Our 2006 letter requested enhancement of this discussion in the Final EIS. Specifically, we requested the Final EIS clearly identify the process, data needs, and key steps that will be used in managing navigational system and ecosystem restoration adaptively.

The Final EIS indicates a key feature of adaptive management is planning and implementing monitoring programs. The discussion includes a description of three types of environmental monitoring that might be associated with the SIP – baseline, impact, and compliance monitoring. Additionally, a generic, conceptual framework for developing a monitoring plan that can be adapted to monitoring environmental media and socioeconomic and/or social impacts was included.

Similar to the discussion included in the Final EIS Executive Summary pertaining to lessons learned from the Upper Mississippi River-Illinois Waterway Navigation Feasibility Study, we recommend the relevant Ohio River and Upper Mississippi River Corps Districts discuss progress made in developing adaptive management strategies for the UMR.

### Institutional Arrangements

EPA recognizes that there are a wide range of jurisdictions, organizations, ongoing authorized projects, and other factors that influence the Ohio River Navigation System navigation performance and ecological health. EPA also recognizes that there is a need for improving the coordination of river management activities among the many stakeholders. Based on these factors, we indicated the 2006 Programmatic Draft EIS did not clearly propose any conceptual plan for addressing institutional arrangements, and that more work was needed to address this subject appropriately. We recommended that a course of action and schedule be outlined as part of the Final Feasibility Report/EIS to define this new authority and its relationship to existing institutional arrangements. We also recommended the Corps formalize and continue collaboration on the implementation of these new management strategies by including them in the Record of Decision, outlining the intent of these management concepts and charting a course towards their refinement and application.

The Final Feasibility Report/EIS indicates that a long-term institutional structure for implementation has not been established. Nevertheless, the Corps' Environmental Planning Team for the Ohio River Mainstem Systems Study (ORMSS) developed an Interagency Working Group (IWG) to help identify scientific information and guidance for the CEA process. The IWG consists of approximately 40 members representing federal and state agencies, as well as several non-governmental organizations. The Final Feasibility Report/EIS indicates it might be appropriate for the IWG to continue involvement with the Corps, dependent on Corps' authority and funding to lead this effort.

We reiterate our previous comment about coordinating with relevant Corps Districts to discuss recent efforts toward developing meaningful institutional arrangements for the UMR effort.

#### Environmental Justice

With regard to the environmental justice analysis, we reiterate our previous comments about looking at census tracts in close proximity to the project area in comparison to the county-wide demographic data. We believe looking at only the county level data will provide very little meaningful information that could be useful in identifying areas or populations of concern. Census tract level evaluation is more reasonable in scope and offers the ability to note communities or population of immediate concern. Additional focus should be given to census tracts where minority and/or low-income populations exceed state averages. Given that these populations have a higher probability of being adversely affected, additional consideration should be given to include these populations/locations as potential areas of concern. The Final Feasibility Report/EIS continues to be silent on whether communities that fall outside of the Metropolitan Statistical Areas and are impacted by the project are included in the area of concern.

Likewise, we reiterate our comment concerning the use of 1.5 times the state poverty level as the benchmark for the environmental justice analysis. The Final Feasibility Report/EIS does not discuss how the value of 1.5 times the state poverty level was determined to be the benchmark in the environmental justice analysis. Since each state has a different set of economic conditions and circumstances, it is not clear how this value will be meaningful across six states. Without further discussion, this value seems inappropriate for use in this context.

#### Cumulative Impacts and Mitigation Plan

The Programmatic Final EIS documents an adequate analysis that characterizes the cumulative impacts that have, currently are, and will occur on the ORMSS. However, our 2006 comment letter indicated the Programmatic Draft EIS did not go far enough in examining and determining the array of mitigation measures that could be implemented to offset the impacts to the various resources and that the cumulative impact analysis was incomplete without the corresponding comprehensive mitigation plan. We stated this type of decision at the programmatic stage is critical to ensure the goals set forth in the Final Feasibility Report/EIS, an environmentally sustainable navigation system, is achievable. We recommended development of a comprehensive system-wide mitigation plan for the Final Feasibility Report/EIS.

We acknowledge the addition of a new section in the Final Feasibility Report/EIS discussing mitigation opportunities. This section indicates the commitments the Corps will make toward mitigating systemic environmental impacts. Foremost among these commitments is adopting sustainability-focused mitigation measures identified in the Final Feasibility Report/EIS for future actions. The discussion also indicates that typical mitigation measures have focused on replacement-in-kind for anticipated adverse effects from planned projects, but future mitigation plans could include measures directed toward enhancing the environmental sustainability of affected resources and ecosystems. We commend this change in philosophy to mitigate for adverse impacts, and request the Corps commit to incorporating this philosophy in all future actions via the ROD.

The Final Feasibility Report/EIS also indicates the Corps intends to develop a National Environmental Restoration Plan (NERP) that will become part of the Combined National Economic Development/National Ecosystem Restoration (NED/NER) Plan for each site specific project in order to address more systemic issues. Similarly, we request the Corps commit to incorporating development of a NERP into the ROD.

#### Water Quality

##### *Structure Design for Fish Protection*

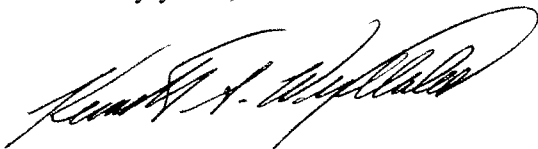
The Corps dealt with our 2006 comment concerning fish passage by identifying fish passage as a system mitigation feature that will be addressed at the site specific level. We reiterate our 2006 comments that the Final Feasibility Report/EIS and ROD should provide a commitment to examine the design of the lock and dam structural modifications to promote the protection of aquatic life. Discussion of aquatic life impacts predicted in build alternative(s) should also focus on alternatives having discharge structures located near-bottom as opposed to high in the water column. Migrating fish species would benefit from the installations of portal passages, which allow passage through the locks during their upstream spawning migration.

In summary, we continue to have concerns with the extent of analysis concerning adaptive management, institutional arrangements, and environmental justice. We request the Corps commit to the following in the ROD:

- incorporating sustainability-focused mitigation measures into the final plan for future site-specific projects involving major maintenance and/or rehabilitation, infrastructure replacements, and lock modernizations;
- incorporating mitigation measures directed toward enhancing the environmental sustainability of affected resources and ecosystems as part of mitigation efforts;
- developing an NERP as part of the Combined NED/NER Plan; and
- committing to examine lock and dam design in an effort to promote the protection of aquatic life.

Thank for you for the opportunity to review and comment on the Programmatic Final EIS for the Ohio River navigation system. We look forward to receiving a copy of the ROD once it has been finalized. Our agency is looking forward to working with you on future projects on the Ohio River. We encourage early coordination on the site specific projects, so that impacts can be avoided and minimized with little or no impact to project schedules and design. If you have any questions or comments, please contact Kathy Kowal of my staff at 312-353-5206 or by E-mail at [kowal.kathleen@epa.gov](mailto:kowal.kathleen@epa.gov).

Sincerely yours,



Kenneth A. Westlake, Chief  
NEPA Implementation Section  
Office of Science Ecosystem and Communities